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U.S. Information Services Market Analysis Program

Wholesale Trade

Information Services Opportunities and Trends, 1994-1999 - Forecast Update

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MVWH • 676 • 1994

Table Of Contents

I	Introduction	I-1
	A. Purpose	I-1
	B. Scope	I-1
	C. Methodology	I-2
	D. Executive Summary	I-3
	E. Related Reports	I-5
II	Wholesale Business Trends	II-1
	A. Wholesale Business Market Overview	II-1
	B. Wholesale Business Trends	II-1
	1. Large Wholesalers Are Growing by Acquisition	II-2
	2. Wholesale Customers Are Larger	II-2
	3. Further Blurring of Retail Products and Services	II-3
	4. Broader Distribution Methods	II-3
	5. Increased Use of Enabling Technologies and Communications Infrastructure	II-3
	6. Developing and Acquiring Skilled Employees for Success	II-3
	7. Growth by International Expansion	II-4
	8. Importing Systems Support International Growth	II-5
	9. Aggressively Acquiring Capital to Finance "Change for Growth"	II-5
	10. Implementing Efficient Consumer Response (ECR) Techniques	II-5
	11. Loss of Wholesale Business Through Alternative Channels of Distribution	II-5
	12. Wholesalers Are Providing Value-added Services to Remain Competitive and Grow	II-6
	13. Aligning IS with Corporate Goals and Business Process Reengineering	II-6

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III	Wholesale Technology Trends	III-1
	A. Wholesale Technology Overview	III-1
	B. Wholesale Technology Trends	III-1
	1. Rapid Growth in Open Systems and Client/Server Technology	III-1
	2. Parallel Processing Will Flourish	III-2
	3. Image Processing Enhances Wholesale Systems	III-2
	4. Radio Frequency (RF) Technology	III-3
	5. Electronic Data Interchange(EDI)	III-3
	6. Wholesalers Use Data Warehousing for Rapid Customer Decision Support Analysis	III-3
	7. Easy-to-Use Executive Decision Support Wholesale Systems Are Shaping the Wholesale Industry	III-4
IV	The Wholesaler as Information Systems Provider	IV-1
	A. Information Provider	IV-1
	1. Network Optimizer	IV-1
	2. Market Maximizer	IV-2
V	Information Services Market Forecast	V-1
	A. Total Market Forecast, 1994-1999	V-1
	B. Forecast by Product/Service Sector	V-2
	1. Professional Services	V-3
	2. Systems Integration	V-3
	3. Outsourcing	V-4
	4. Processing Services	V-4
	5. Network Services	V-4
	6. Applications Software	V-4
	7. Turnkey Systems	V-4
VI	Wholesale Case Studies	VI-1
	A. C & S Wholesale	VI-1
	B. Richmond	VI-1
	C. Spartan Stores	VI-2
	D. Associated Wholesale Grocers	VI-2

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VII Conclusions and Recommendations VII-1
A. Conclusions VII-1
B. Recommendations VII-1
1. Business Recommendations VII-1
2. Technology Recommendations VII-2

A Forecast Database and Reconciliation A-1
A. Forecast Database A-1
B. Forecast Reconciliation A-3

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Exhibits

I

-1 Wholesale Industry Sectors by SIC Code I-2

II

-1 Percentage of Market Share Among Small, Medium and Large-Sized Wholesalers II-2

-2 Wholesale Sales Forecast – Canada, Mexico and Europe II-4

V

-1 Wholesale U.S. Information Services Market, 1994-1999 V-2

-2 Information Services Market by Product/Service Sector, 1994-1999 V-3

A

-1 Wholesale Trade – User Expenditure Forecast by Product/Service Sector, 1993-1999 A-2

-2 Wholesale Trade – 1994 Market Analysis Program Database Reconciliation A-2

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I

Introduction

A
Purpose

The purpose of INPUT's 1994 *Wholesale Trade Forecast Update* is to provide information and analysis for the wholesale industry and a discussion of business and technology trends that are changing and shaping the wholesale industry. With alternative distribution channels on the rise, and as just-in-time production and distribution techniques are implemented, the number of wholesale companies is decreasing. However, this does not herald the demise of the wholesale industry. It does mean a shift in marketing positioning. Wholesalers are adopting competitive countermeasures, including downsizing and consolidation, just-in-time distribution techniques, and greater use of information technology (IT). They are providing their customers and suppliers with advanced IT wholesale operations techniques in order to survive, grow and remain profitable. This 1994 INPUT forecast discusses these recent market issues that influence the wholesale industry market today.

B
Scope

The scope of this analysis and forecast is limited to the wholesale industry sector. The wholesale market as defined by INPUT is composed of the following SIC wholesale groups, as presented in Exhibit I-1.

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Exhibit I-1

Wholesale Industry Sectors by SIC Code

Durable Goods	
501	Motor Vehicles and Automobile Equipment
502	Furniture
503	Lumber and Construction
504	Sporting Goods and Toys
505	Metals and Minerals
506	Electrical Goods
507	Hardware, Plumbing, and Heating Supplies
508	Machinery and Equipment
509	Miscellaneous Durables
Nondurable Goods	
511	Paper and Paper Products
512	Drugs and Sundries
513	Apparel, Piece Goods, and Notions
514	Groceries and Related Products
515	Farm Products
516	Chemicals and Allied Products
517	Petroleum and Petroleum Products
518	Beer, Wine and Other Distilled Beverages
519	Miscellaneous Nondurables

C
Methodology

Information and data for this report were obtained by interviewing wholesalers early in 1994. These wholesalers are both large and small companies. They were interviewed for identifying both business and technology trends in the wholesale marketplace.

Extensive use was made of INPUT's corporate library, located in Mountain View, California. The resources in this library include on-line periodical databases, subscriptions to a broad range of computer and general business periodicals, continually updated files on over 3,000 information services vendors, and the most up-to-date U.S. Department of Commerce publications on industry statistics.

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D
Executive Summary

This report describes the many business trends, information systems concerns and anticipated changes that will occur in the wholesale industry in the next few years. It also presents four case studies that describe how wholesalers are changing and using information technology to provide value-added services that enable them to grow and compete in today's wholesale market. And finally, INPUT forecasts the total IS market and each product/service sector from 1994 through 1999.

The wholesale market is seeing great business changes that are shaping and dramatically changing how wholesalers conduct business in the 1990s. Trends indicate that the future of wholesale will revolve around some dramatic business changes (discussed in detail in Chapter II), including the following.

- Although 15-20% of national wholesalers have disappeared since 1985, the surviving companies are expanding by consolidating.
- Wholesale's retail customer base is evolving toward chains and larger retail stores.
- Non-store wholesalers will continue to add food products, and wholesale grocers will expand their products and services beyond the normal food/merchandise mix.
- Wholesalers will continue to add alternative channels of distribution and increase their value-added services to keep existing customers.
- The strategic implementation of information technology will be pivotal to wholesalers' success.
- The ability to attract and hire quality talent remains a necessity for success.
- Wholesalers will grow by international expansion.
- Wholesalers are aggressively acquiring capital to finance changes for growth.
- Implementing Efficient Consumer Response (ECR) techniques is key to future wholesale growth and success.

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- Loss of wholesale business is occurring through alternative channels of distribution, such as direct supplier-to-retailer arrangements; mail order; catalog sales; and electronic shopping, which includes virtual inventory.

- Aligning IS with corporate goals and business process re-engineering is becoming increasingly crucial.

For many years, wholesalers have recognized information technology as one of the keys for improved performance in sales, productivity, and for increased speed and efficiency both at corporate offices and at the warehouse and distribution supply chain level.

Today, IT is enabling new retail business processes and key technical trends, which are discussed in Chapter III. These technical trends include:

- Revamping systems with a focus on ECR.

- Helping retail customers upgrade their IS and supply chain operations.

- Improving supplier and retail customer business operations by providing EDI services with information services.

- Moving away from mainframe legacy systems to open systems and client/server technology.

- Preparing for parallel processing technology.

- Implementing image processing technology with replenishment, order processing, warehouse systems and financial systems.

- Taking full advantage of radio frequency (RF) in order to provide cost-effective delivery options for suppliers and retail customers.

- Using EDI technology more extensively to eliminate paper and time, and speed up the transfer process of goods.

- Using data warehousing for rapid customer decision support analysis and for implementing executive decision support systems.

Chapter IV identifies and discusses the new wholesalers' role as "information systems provider," which includes the following roles:

- Network Optimizer

- Market Maximizer

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- Automated Replenishment Coordinator
- "Supply Side" Optimizer
- Market-based Distributor for Slow-moving SKUs
- Consolidator
- Strategic Marketer

Chapter V presents a total market forecast over the next five years, and a forecast by each of the following product/service sectors over the next five years:

- Professional Services
- Systems Integration
- Outsourcing
- Processing Services
- Network Services
- Applications Software
- Turnkey Systems

Chapter VI gives the case studies of four wholesale companies, and Chapter VII concludes this Wholesale Trade report with INPUT's conclusions and business and technical recommendations for the wholesale industry.

E
Related Reports

These INPUT reports are related to this *Wholesale Trade, 1994-1999* report. They include:

Information Systems Opportunities and Trends, 1994-1999—Retail Trade

Client/Server Applications Trends—Retail Industry

U.S. EDI and Electronic Commerce Markets 1994—1999

Electronic Catalogs Market: Status & Directions

Electronic Commerce in Industry Segments - Distribution

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II

Wholesale Business Trends

A
Wholesale Business Market Overview

Although sales and earning growth has been sluggish in the wholesale industry in the last two years (estimated at $1,973 billion in 1993) we will see an increase of approximately 2%-4% in 1994, due to continued restructuring of the wholesale industry. The wholesale industry consists of a few large companies and many small firms. The number of wholesalers dropped from 364,000 firms in 1987 to approximately 280,000 companies in 1993. This is largely due to mergers, acquisitions, and business failures, according to the U.S. Department of Commerce.

A significant part of the sluggishness of sales by wholesale companies over the last few years may be attributed to the restructuring of the wholesale industry. The principle features of this restructuring are:

- Increased use of alternative channels of distribution
- A changing mix of products offered
- Value-added services, which are expensive, but necessary to keep existing customers and to grow

B
Wholesale Business Trends

The following outlines some of the key business trends shaping the wholesale industry over the next few years. These trends indicate that the future of the wholesale industry will revolve more around value-added services that include "just-in-time" (JIT) distribution techniques and less adversarial, closer relationships with suppliers and retailers.

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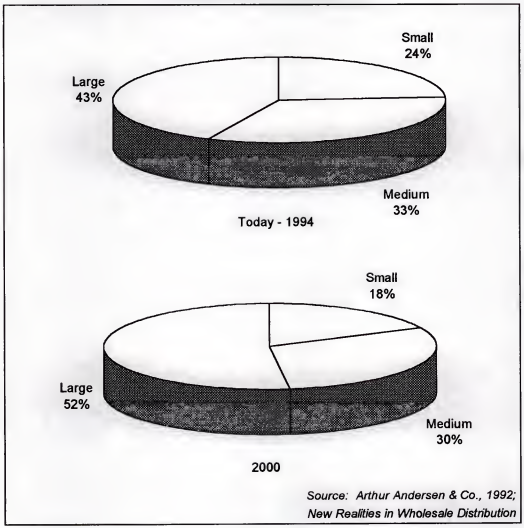
1. Large Wholesalers Are Growing by Acquisition

Although 15%-20% of the nation's wholesalers have disappeared since 1985, the surviving wholesalers are expanding by consolidating. The reasons for consolidation are to grow geographically, and grow by product line expansion and diversity. Exhibit II-2 shows the current and projected splits in the wholesale market.

Exhibit II-1

Percentage of Market Share Among Small, Medium and Large-Sized Wholesalers



Source: Arthur Andersen & Co., 1992; New Realities in Wholesale Distribution

2. Wholesale Customers Are Larger

The wholesale customer base will continue to evolve toward larger chains and larger retail stores. The needs of the independent retailer and the needs of larger chains will become increasingly diverse, requiring

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wholesalers to provide more sophisticated value-added services tailored to the large chains, and another set of value-added services for the independent retailer.

3. Further Blurring of Retail Products and Services

Wholesale grocers' existing retail customers will continue to expand their product and service offerings beyond food. Non-food wholesalers will continue to add food products into their merchandising mix.

4. Broader Distribution Methods

As the wholesale industry continues to rationalize its distribution methods, continuous replenishment, crossdock techniques, and direct-store deliveries will likely increase. These trends will change the way in which wholesalers add value and get compensation. Their key role will expand from moving product through the warehouse to providing intelligent "distribution network optimizing" functions.

5. Increased Use of Enabling Technology and Communications Infrastructure

The strategic implementation of information Technology will be pivotal to supply-chain success. As advanced information tools and communications systems become increasingly affordable and available through third-party vendors, this technology will become a requirement in the pursuit of more sophisticated operational and marketing programs.

6. Developing and Acquiring Skilled Employees For Success

One of the most important issues facing the wholesale industry is the ability to attract and develop high-quality talent. Individuals with skills in marketing sales and strategy formulation will become increasingly valuable assets.

According to Arthur Andersen, as published in *New Realities in Wholesale Distribution*, actions wholesalers can take include:

- Defining the skills and technical requirements needed to perform various key functions
- Ensuring that compensation levels are adequate and consistent with business strategies
- Giving employees an understanding of the "big picture" of the industry and how they fit within the framework

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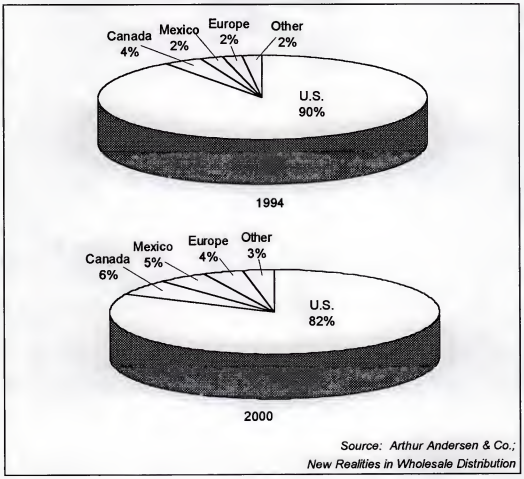
7. Growth By International Expansion

Numerous major U.S. wholesalers are now operating in least one other country. This trend appears to be growing, because many mature wholesalers have recognized they can no longer grow at an acceptable rate in the U.S. and must look to foreign markets. The passing of the North American Free Trade Agreement has removed investment barriers and liberalized trucking and data communications for U.S. wholesalers to enter Canadian and Mexican markets. U.S.-based international wholesale firms appear to be specifically targeting increased business in Europe. Even local and small wholesalers see non-U.S. sales growing 16%-17% per year by 2000, as shown in Exhibit II-2.

Exhibit II-2

Wholesale Sales Forecast—Canada, Mexico, and Europe
(Percentage of total sales)



Source: Arthur Andersen & Co.; New Realities in Wholesale Distribution

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8. Importing Systems Support International Growth

Wholesalers are implementing "importing systems," which provide paperwork reduction and the infrastructure to enable JIT importing. Major wholesalers who do not install importing systems are outsourcing the importing process to companies such as GE Information Services that literally have the technology structure and people available to handle the importing process in every major country in the world.

9. Aggressively Acquiring Capital to Finance "Change For Growth"

Dramatic changes are occurring in the business operations of the wholesale industry. In order to change, wholesalers are aggressively financing these changes, often incurring large debt. The successful wholesale companies are altering the way they operate with "new realities of operations" in order to survive, grow, prosper, and meet the changing retailer/customer needs.

10. Implementing Efficient Consumer Response (ECR) Techniques

ECR is an industry-wide effort by wholesalers, retailers, and suppliers to integrate the supply chain by installing EDI systems and radio frequency (RF) technology to share information about sales, orders, production schedules and payments. The ultimate goal is to cut stock levels, and to reduce the time required for a product to move from the supplier's gate to the check-out counter from 100 days to 60 days. In other words, wholesalers are boldly implementing JIT replenishment techniques for their retail customers.

ECR's biggest obstacle is not the technology, which is already widely used in other industries, but getting wholesalers, suppliers, and retailers to behave as partners rather than adversaries. ECR empowers the wholesaler to change from a "push" approach to business operations to one where the industry is "pulled" forward by retailer/customer demand.

11. Loss of Wholesale Business Through Alternative Channels of Distribution

A slower economy has tended to reinforce new alternative channels of goods distribution. The most damaging alternative channel to wholesalers are "direct supplier-to-retail" arrangements, usually made under strategic alliances with major retail chain stores, warehouse clubs, discount stores, and home center stores. Other alternative channels that have emerged include mail order, catalog sales, electronic shopping networks, and virtual inventory. Products distributed through these alternative channels are "lost" sales for wholesalers, which helps explain

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why 15%-20% of U.S. wholesalers have disappeared since 1985. According to industry specialists, about 25% of all merchandise usually handled by wholesalers is now being distributed through alternative channels.

12. Wholesalers Are Providing Value-Added Services to Remain Competitive and Grow

With wholesalers consolidating, and alternative channels of distribution taking away business, the surviving wholesalers are re-examining and readjusting their strategies for maintaining services. The basic services traditionally offered by wholesalers include:

- In-stock inventory
- Small-order handling
- Credit terms
- Product training for employees and retail customers

These basic services are no longer sufficient. Successful wholesalers are now offering value-added services such as:

- Providing strategic alliances with suppliers
- Providing more diversified product lines
- Expanding geographic coverage overseas

Wholesalers can reverse—or at least reduce—the move to alternative channels of distribution by becoming invaluable to their retail customers and by establishing closer partnerships with their manufacturers and suppliers. Ultimately, wholesalers must adopt an aggressive program to improve and expand value-added services by anticipating the needs of the retailer and using current technologies to improve productivity, reliability, and service quality.

13. Aligning IS with Corporate Goals and Business Process Reengineering

Wholesalers are beginning to take a process view of their business rather than focus on cost centers and cost reduction. Today, the successful business process reengineering effort integrates processes, people, and technology, and aligns them with customer needs. For the wholesaler today, business process reengineering has to do with survival. Alternative distribution channels have eroded wholesale business. Wholesalers must re-engineer their business processes. Business process

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reengineering is designed to achieve two things in the wholesale industry: lower operating costs and redeploy resources into value-added services that will improve sales and investment return.

- Free delivery
- Relabeling
- Repacking
- Applying bar codes
- Installing EDI systems to assure next-day delivery; product tracking; and comprehensive inventory controls
- Developing markets for manufacturers/suppliers
- Providing service manufacturers' warranties
- Automating shipping and receiving activities through radio frequency technology

For the wholesaler to be successful in the 1990s, reengineering fundamental business processes and aligning technology with corporate goals will be necessary not for only survival, but for growth and prosperity in a mature economy.

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III

Wholesale Technology Trends

A
Wholesale Technology Overview

For many years, wholesalers have recognized that technology is one of the keys to performance in sales and productivity, and retail/customer and supplier satisfaction.

Today, wholesalers' technology priorities fall into three areas:

- Revamping their own systems with a focus on Efficient Consumer Response (ECR)
- Helping their retail customers upgrade their operations
- Improving suppliers' and retail customers' business operations by providing EDI services with information services, including improved inventory control delivery scheduling and marketing information

B
Wholesale Technology Trends

1. Rapid Growth in Open Systems and Client/Server Technology

Today, wholesale IT systems are primarily implemented in a mainframe/minicomputer environment (85%) with only 10% of wholesalers developing systems residing in open client/server, PC or client/server network environments. However, INPUT predicts radical changes in wholesale IT system development. In the next three to five years, approximately 50% of wholesalers will develop open systems in a client/server, PC or workstation environment; approximately 33% will continue to develop IT systems in a mainframe/minicomputer environment; and approximately 17% will develop client/server systems on PC networks. Wholesalers are moving from mainframe/minicomputer platforms for many reasons, including better client/server software

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development tools; availability of standard, cost-effective, open systems hardware; and the ease of adding numerous applications without replacing computer hardware. An open, client/server environment allows a company to grow, change, and add numerous applications without replacing computer hardware.

2. Parallel Processing Will Flourish

As new wholesale applications are developed or retooled, parallel open systems will benefit wholesale retail customers and suppliers. The speed and power of parallel processing is accomplished by distributing the work across multiple processors, each doing part of the work simultaneously.

Parallel processing allows wholesalers to quickly process data that has accumulated from every store in every retail chain for a year or more. Such a large volume of data could choke the largest mainframes available today. Thomas Blischok of NCR has stated that parallel machines will serve as the basis for high-performance inventory replenishment systems in most wholesale companies by the end of the century. Wholesalers will be able to analyze massive amounts of data, including movement history by product at retail store level, price points, promotions, and supplier delivery ability. This can't be done today with mainframe computers.

Wholesalers will be able to use massively parallel machines to keep track of item movement for weeks, by retail chain (and individual store) and by SKU. This will allow the wholesaler to deliver SKUs in the right quantities, to the right retailer customers. It is just the beginning of what parallel systems can do to help wholesalers provide value-added services to their customers and suppliers in order to remain competitive and grow.

3. Image Processing Enhances Wholesale Systems

Many wholesalers are now implementing enhanced replenishment, order processing, warehouse systems, and financial systems that incorporate "image" information. One such company, FourGen of Seattle, has developed new financial, replenishment, and warehouse management systems. In developing these systems, the company went well beyond composing a product order shows the user not only a picture of the product, but product usage over time. The user can click on a chart showing order quantities and directly adjust the graph of desired stock levels to enter the amount to purchase. These systems enable wholesalers to provide high-volume order fulfillment and to deliver products to their retail customers quickly and accurately while maintaining minimal inventory. These systems enable wholesalers, retail chains and suppliers to manage the distribution of large product volumes.

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4. Radio Frequency (RF) Technology

Radio Frequency allows a wholesaler to provide cost-effective delivery options for its suppliers and retail customers. RF terminals used in the warehouse, on forklifts, give operators complete access to product location information, both when products are picked for shipping and when they are put away. Some merchandise canned upon arrival at the warehouse need not be put away—it can go from the back door onto another truck almost immediately, so retail customers receive merchandise faster. The data collection goes into the computer system with the same speed, meaning wholesalers have access to up-to-date information that they can pass on to suppliers and retail customers right away.

5. Electronic Data Interchange (EDI)

More than 50% of wholesalers use EDI systems. INPUT predicts another 20%-35% increase in EDI systems use within the next few years. Wholesalers see the value of eliminating paper and time to speed up the transfer of goods. Most wholesalers have at least purchase order, invoice, and electronic funds transfer capabilities installed with their EDI systems. Most wholesalers are planning to integrate the following EDI technology functions into their systems within the next two years.

- SKU-level transaction processing systems
- Shipping container marketing
- Automated delivery-receiving systems
- Automated price changing and look-up
- POS information system linkages

Cooperative sharing of data between wholesalers, retailers, and suppliers is the key to wholesalers' survival in the long term, and EDI technology allows them to do it.

6. Wholesalers Use Data Warehousing For Rapid Customer Decision Support Analysis

Data warehousing is an integrated, consistent set of data accessible by empowered users and managers to support analysis and decisions. It is typically a separate database environment that has no impact on production systems or operational data applications. It provides the ability to turn data into information for competitive advantage. For example, the information for sales analysis resides in a "data warehouse" so data can be manipulated from any perspective. The data warehouse is flexible and easily extensible, allowing managers to redesign tasks to

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more exactly meet their organization's decision-making needs. The data warehouse can reside on one or more client workstations, a departmental DOS system, Windows NT, or a UNIX server. Smaller versions of the data warehouse can be created automatically for laptops, or automatically distributed to other servers on a network. Also, the data warehouse can reside on any supported ODBC-compliant database.

7. Easy-to-Use Executive Decision Support Wholesale Systems Are Shaping the Wholesale Industry

New client/server and open systems with easy-to-use windows-like user interfaces are increasingly utilized by wholesale senior management. These easy-to-use tools are now readily available. According to Mike Saylor, president and founder of MicroStrategy, Inc., a systems integration company that markets high-level decision support systems for the retail industry, senior executives of large companies (e.g., Flemming, Associated Grocers, Supervalue, etc.) are implementing and using decision support systems to do the following:

- Ad hoc reporting
- Ad hoc analysis—to calculate profitability, analyze and calculate pricing, trade promotions, etc.
- Automated analysis using standard methodologies to analyze various business "least cost" options
- Automated decision making, which allows for cybernetic decision making such as the best cost option for delivering product(s) to retailers (e.g., DSD; crossdock programs; moving DSD product(s) through wholesaler's DC, etc.) These choices would flag actions that must be taken for any of these business activities to be profitable and cost effective.

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IV

The Wholesaler As Information Systems Provider

A
Information Provider

Wholesalers that focus on total supply chain management and possess the infrastructure, systems and technology to deliver value-added services will be very successful. The wholesalers' role will evolve to become a "network optimizer" and eventually a "market maximizer."

1. Network Optimizer

In the network optimizer role, wholesalers will continue to focus on minimizing the delivered cost of products from the supplier to the retailer. Wholesalers will function as the "optimizer" by coordinating the entire logistics process for their retailers, regardless of whether products move through the wholesaler's own warehouse.

In an "optimizer" role, wholesalers will need to be able to select the least costly option based on comparing their costs of handling or shipping products to those of suppliers or other third-party players. This includes how products are shipped—DSD, crossdock, and the like.

In effect, wholesalers would generate fees based on their superior ability to select and coordinate the most efficient movement of goods from the shelf to the store. As wholesalers become network optimizers, they will need to:

- Develop an organization with the skills and systems capable of selecting the least costly alternative for moving products to customers
- Build sophisticated information systems that link their retailers with suppliers, brokers, and banks. This network should be capable of capturing and managing POS data to support order management, forecasting, and perpetual inventory management.

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- Make the network available as the "electronic highway" supporting all EDI transaction sets, electronic funds transfer, and POS auditing to support trade promotion activities

- Redesign selling strategies to enable the wholesaler to offer broader categories of goods through a wider array of distribution techniques to existing and non-traditional customers. In effect, this would allow wholesalers to sell their "network optimizer" services to any retailer or supplier.

2. Market Maximizer

To act as market maximizers, wholesalers will have to provide sophisticated services such as:

- Retail strategy services to help retail customers develop differential market strategies. These strategies would focus on store-level plans, including product assortment, space management, in-store merchandising, pricing, customer service programs, and other tactics designed to improve local competitiveness.

- Customized category management services that focus on creating more effective promotions, pricing strategies, and state-of-the-art target marketing programs for retail customers

- Activity-based costing and DPP services that provide an improved understanding of in-store costs and profitability at the category level

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Information Services Market Forecast

A
Total Market Forecast, 1994-1999

Expenditures for information services in the U.S. wholesale market continued growing between 1993 and 1994. In the 1994 edition of *U.S. Industrial Outlook*, sales in 1993 totaled $1,973 billion in raw materials and manufactured products. Industry revenues are expected to grow at a modest 3%-4% annually between 1994 and 1999, to $2,233 billion. For the majority of U.S. wholesalers, INPUT believes IT expenditures for the wholesale market will vary between 0.5% and 1% of total sales as a budget and spending figure.

Information services will grow at a more aggressive 13% CAGR as automation trends and competitive pressures on both U.S. and global markets drive the need for increased automation. In addition, efficient control and tracking methods will be delivered cost effectively by the use of IT resources and information services.

The total growth of information services expenditures in the U.S. wholesale industry between 1994 and 1999 is shown in Exhibit V-1

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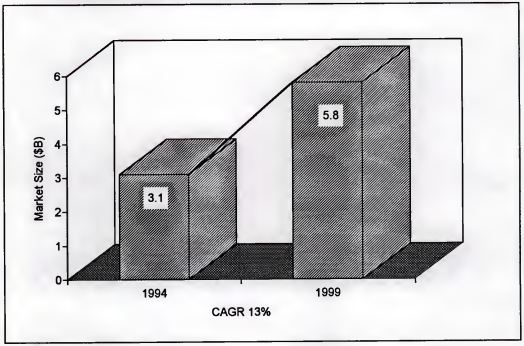
Exhibit V-1

Wholesale U.S. Information Services Market, 1994-1999



Information services growth will increase slightly, from 11% between 1993 and 1994 to a 13% CAGR for 1994-1999. This growth will be restrained somewhat by consolidations as major national and regional wholesales absorb smaller, local firms. However, growth will occur as expenditures for IT increase from the low 0.5% of revenues to slightly more than 1% by 1999. The increase will be necessary in order to compete more effectively in both the U.S. and global markets.

B

Forecast by Product/Service Sector

The five-year forecast of user expenditures by product/service sector in the wholesale market is shown in Exhibit V-2. Discussion of the individual forecasts for the product/service sectors follows this exhibit.

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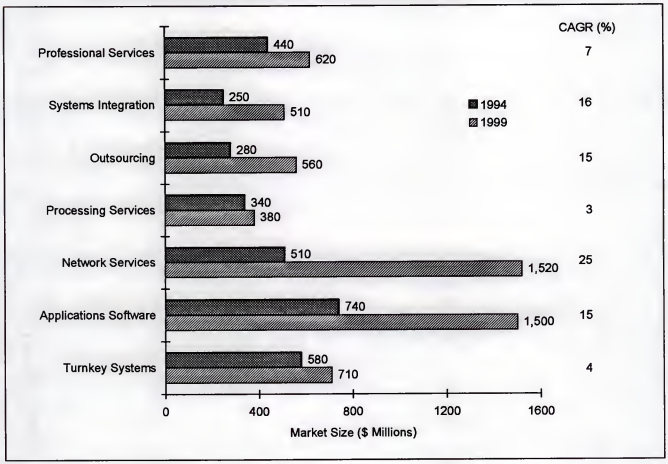
Exhibit V-2

Information Services Market by Product/Service Sector, 1994-1999



1. Professional Services

Overall growth remains constant at 7%, but short-term IS consulting is up in 1994 due to increased interest in defining improved IS solutions in an era of consolidations and acquisitions. Long-range IS consulting growth will reach 1998-1999 goals estimated last year, but will get a slightly faster start in 1994.

2. Systems Integration

SI growth is driven, as is that of professional services, by changes in the wholesale industry requiring restructuring of the IS function to gain or maintain competitiveness. Growth per year is steady at 16%.

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3. Outsourcing

Outsourcing growth in the wholesale industry will remain the same in 1994 as it was in 1993, and will grow at a steady 15% through the year 1999.

4. Processing Services

Processing services continues its moderate downward trend, as better central and distributed IT/IS solutions offer cost-effective replacements.

5. Network Services

Shared information between wholesalers, retailers, and suppliers will drive growth of databases and data networks in the wholesale distribution function of the future. Plus, EDI-enhancing delivery efficiencies and open systems controlling inventory costs will drive network services.

6. Applications Software

As processing services and turnkey solutions diminish, industry and function-specific applications software will be used to monitor and control all aspects of wholesale activity. Mainframes will become less important, as parallel processors take over the enormous information exchange that will be necessary for the value-added services offered by wholesalers.

7. Turnkey Systems

There will probably always be a place for application-/industry-specific platforms in the wholesale industry, but their number will diminish, as will the moneys spent for them. There will still be some growth in this market, but it will almost certainly turn negative in the first decade of the next millennium.

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VI

Wholesale Case Studies

Whether they are reengineering or making evolutionary changes, wholesalers have been altering traditional ways of doing business. In this chapter INPUT provides a look at how some wholesale firms are changing with the times.

A
C & S Wholesale

After a year-long pilot program that enlisted eight manufacturer participants, C & S Wholesale, Inc., of Brattleboro, Vermont, has an operations program that includes: a custom billing system that gives manufacturers and retailers more direct negotiation flexibility; warehouse consolidation services; consolidation of slow-moving items in continuous replenishment programs; crossdocking facilities allowing manufacturers to move goods to market without warehousing; a custom merchandising program; and newly developed category management reports for independent stores and manufacturers.

The C & S program took more than two years to develop. The wholesaler, which supplies 616 stores (including eight supermarket chains that account for 75% of C & S retail business), conducted strategy sessions with a carefully selected group of manufacturers to find out which services would be of greatest value. "Tangible results" noted by participating suppliers were said to include "elimination of diverting; reduction of forward buying, and elimination of double payment on promotions." As C & S expands on its role as Local Market Distributor for more suppliers, it will blaze a path for other wholesalers to follow.

B
Richfood

Richfood began making wholesale changes about four years ago. The firm realized there was "neither rhyme nor reason" behind its fee structure, according to Don Bennett, president. Richfood unbundled services. "We

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decided to be a true cost-plus house," Bennett reported. The only markup was one of up to 3% on private labels. On key items that didn't have much of a markup at retail—such as coffee, tuna, sugar and diapers—cash discounts were passed on to retailers.

Richfood instituted a minimum order size and charged a fee for anything less. "We went from 600 units per order to 1,100," Bennett said. The delivery charge was restructured from a percentage basis to one based on hundred-weight. "We opened the warehouse for pickup by retailers and also let in private haulers. We went into crossdocking in a big way on pallets and even half pallets. We also got into drop shipments."

Richfood put in an incentive/reward system for big buyers. The wholesaler is managing inventory better. Turns are better than 16, with a goal of 18 to 20. Damages are down and service levels are up. The improvements didn't come without a price, however. Last year, Richfood spent $12 million on technology.

C
Spartan Stores

There are no sacred cows at Spartan Stores. The retailer-owned wholesaler is examining more than 50 business practices under a program it calls BASE (Business Automation Support Environment). BASE projects include:

- Developing logistical models on how many distribution centers Spartan will need, as well as strategies on inventories and net-landed costing
- Designing a continuous replenishment system to interface with customers, providing retailers with on-line capability for ordering and for last-minute order changes

Also included in this program are activity based costing, improved product forecasting, retail systems to allow customers to use technology better, and systems to facilitate vendor partnerships.

D
Associated Wholesale Grocers

Associated Wholesale Grocers tries to represent its 750 stores as if it were a chain headquarters, according to president Mike DeFabis. "We have to be able to supply the corner store and the chain equally well." In doing this, the co-op has separated services from the cost of goods. Associated Wholesale Grocers emphasizes three things:

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- Giving members the lowest cost of goods
- Offering a strong retailer development program
- Emphasizing retail support

The co-op is studying its operation every day, but it won't change just for the sake of change. Among the things AWG is doing are direct shipments from suppliers to stores, giving pallet allowances, and reducing the number of deliveries per store while providing higher loads. It also uses combination loads, with perishables and dry groceries on the same truck. The perishables portion of AWG's business keeps increasing. As long as it has a healthy mix, the company can put off making any changes in margins, according to DeFabis. The wholesaler has a variable markup policy that gives a blended margin.

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VII

Conclusions and Recommendations

A Conclusions

The wholesale industry is radically changing due to many factors. The downturn of the economy during the early 1990s caused wholesalers to adopt new competitive, aggressive business actions and progressive technical programs that are driving business opportunities. Programs include acquisition and consolidation; developing the technology (i.e., ECR) processes needed to work effectively with suppliers and retailers as partners rather than as adversaries; and implementing more and varied value-added services to attract new customers and keep existing customers.

However, what really has changed in the last few years is the fact that wholesalers, more than ever before, are embracing information technology as an agent of change. They are committed to using technology to advance and grow their businesses. Today, wholesalers are embracing technology not just to keep up with the changes in their industry, but to help drive change and growth.

B Recommendations

1. Business Recommendations

Wholesalers' market share is at risk due to the increasing influence of direct-buying retailers and warehouse clubs, as well as the acquisition and consolidation of wholesalers in the U.S. Steps wholesalers can take to protect their market position, and in the long term fuel growth, include:

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- Conduct a strategic evaluation of current competition that includes an evaluation of each competitor's strengths and weaknesses versus the wholesaler's strengths and weaknesses.

- Evaluate retail customers' purchasing from alternative channels and the wholesaler's vulnerability to encroachment by these competitors.

- Develop a specific action plan to combat major competition in major customer segments, including pricing, marketing, and "service" strategies.

- Evaluate and align corporate goals with "business processes" rather than concentrate on cost centers, and learn to redeploy resources in value-added services that will improve sales and return on investment.

- Develop an acquisition strategy—both as a purchaser and an acquisition target.

- Interview key customers to better understand their business objectives, needs and expectations of the wholesaler.

- Address key areas in which the company is not meeting service expectations and reinforce existing positive customer/retailer perceptions.

- Analyze the types of marketing functions performed for suppliers and retailers; quantify the cost of each; and discuss this with suppliers and retailers to ensure their continued satisfaction and the wholesaler's continued profitability.

- Evaluate relationships with top suppliers in terms of needs and expectations, and work to create ones that are mutually satisfactory.

- Develop or acquire skilled employees by: defining the skills and technical requirements needed to perform various key functions; determining which skills or training will be needed of new and existing employees; and ensuring that compensation levels are adequate and consistent with business strategies.

- Change product mix to accommodate the different demographics of retail customer service in the local area.

2. Technology Recommendations

- Wholesalers need to become obsessed with technology. With technology, the change in skills and knowledge is getting faster; wholesalers must respond rapidly in order to compete effectively in the wholesale industry of the 1990s.

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- Start preparing for the Information Superhighway. View this technology as a future distribution channel, and a value-added service. As mentioned earlier in this report, due to the influence of direct-buying retailers and wholesale clubs, wholesalers must be willing to be pioneers, and boldly embrace this new technology and distribution channel.

- Plan to "outsource" and "partner" much of your IT and IS to stay competitive. Wholesalers can't possibly develop innovative technology solutions alone, and within the time requirements needed to be competitive.

- Move mainframe legacy data systems to open systems and client/server PC or workstation environments. Become more software "solutions"-oriented, rather than hardware dependent.

- Develop user interfaces with user friendly icons, graphic user interfaces, and image pictures for easy-to-use, powerful systems.

- Provide more and better training materials that are intuitive and easy to grasp and use. As part of these training materials, develop training sessions and classes for high-level executive users.

- Develop more data warehouse decision support systems, geared for various wholesale operation systems, and for efficient decision support systems.

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Forecast Database and Reconciliation

A
Forecast Database

Exhibit A-1 presents INPUT's detailed 1993-1999 forecast for the wholesale trade sector.

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Exhibit A-1

Wholesale Trade
User Expenditure Forecast by Product/Service Sector, 1993-1999

PRODUCT/SERVICE SECTOR	1993 ($M)	Growth 93-94 (%)	1994 ($M)	1995 ($M)	1996 ($M)	1997 ($M)	1998 ($M)	1999 ($M)	CAGR 94-99 (%)
SECTOR TOTAL	2813	11%	3134	3510	3948	4459	5058	5788	13%
Professional Services	410	7%	439	471	505	541	578	616	7%
- IS Consulting	90	11%	100	110	121	133	145	157	9%
- Education & Training	60	7%	64	67	71	74	78	82	5%
- Software Development	260	6%	275	294	313	334	355	377	7%
Systems Integration	211	16%	245	284	328	380	439	509	16%
- Equipment	67	15%	77	88	101	116	133	152	15%
- Software Products	15	20%	18	22	26	32	38	44	20%
- Professional Services	123	16%	143	166	192	222	256	299	16%
- Other	6	17%	7	8	9	10	12	14	15%
Outsourcing	247	14%	282	323	371	425	486	556	15%
- Platform Operations	110	13%	124	141	160	180	203	228	13%
- Applications Operations	78	13%	88	98	112	128	144	166	14%
- Desktop Services	34	18%	40	49	58	69	83	98	20%
- Network Management	25	20%	30	35	41	48	56	64	16%
Processing Services	325	4%	337	349	360	367	373	382	3%
- Transaction Processing	325	4%	337	349	360	367	373	382	3%
Network Services	411	23%	507	631	786	983	1217	1521	25%
- Electronic Information Svcs	79	14%	90	101	113	128	142	161	12%
- Network Applications	332	26%	417	530	673	855	1075	1360	27%
Applications Software	661	12%	741	841	962	1104	1284	1499	15%
- Mainframe	258	6%	274	283	290	298	304	326	4%
- Minicomputer	151	9%	165	179	193	205	215	228	7%
- Workstation/PC	252	20%	302	379	479	601	765	945	26%
Turnkey Systems	548	6%	583	611	636	659	681	705	4%
- Equipment	243	2%	249	255	259	263	267	271	2%
- Software Products	205	10%	225	239	252	263	274	286	5%
- Professional Services	100	9%	109	117	125	133	140	148	6%

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B
Forecast Reconciliation

Exhibit A-2 presents a reconciliation of INPUT's 1994 forecast with the 1993 forecast for the wholesale trade market.

Information services expenditures for the wholesale trade industry have been relatively stable over the last few years, as noted in Exhibit A-2's range of variances between 1993 and 1994 estimates of the 1993 market. The variances, by product/service category, ran from 0% to 3%, with the largest variance (3%) the result of a slightly stronger than anticipated use of processing services for transaction processing in 1993.

Coincidentally, forecasts of growth based upon the revised 1993 and 1994 spending figures yielded slight changes in every year except 1998, when the spending estimates exactly replicated the 1998 figures contained in last year's report. Compound annual growth rates for 1993-1998 show a very slight variation from the last report to this one, and the downward variances of 1% each for outsourcing, network services, applications software, and the industry as a whole, reflect the modest increase in 1993 spending for these activities.

Exhibit A-2

Wholesale Trade
1994 Market Analysis Program Database Reconciliation

PRODUCT/SERVICE SECTOR	1993 Market				1998 Market				93-98 CAGR per data '93 Rpt (%)	93-98 CAGR per data '94 Rpt (%)
	1993 Market (Forecast) ($M)	1994 Report (Actual) ($M)	Variance From 1993 Forecast ($M)	Variance From 1993 Forecast (%)	1993 Market (Forecast) ($M)	1994 Report (Forecast) ($M)	Variance From 1993 Forecast ($M)	Variance From 1993 Forecast (%)		
Total	2776	2813	37	1%	5058	5058	0	0%	13%	12%
Professional Services	403	410	7	2%	578	578	0	0%	7%	7%
Systems Integration	209	211	2	1%	439	439	0	0%	16%	16%
Outsourcing	244	247	3	1%	486	486	0	0%	15%	14%
Processing Services	317	325	8	3%	373	373	0	0%	3%	3%
Network Services	403	411	8	2%	1217	1217	0	0%	25%	24%
Applications Software	653	661	8	1%	1284	1284	0	0%	14%	14%
Turnkey Systems	547	548	1	0%	681	681	0	0%	4%	4%

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